Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

Title V Final permit No. V-02-015 (Revision 1)
TOPY CORPORATION
FRANKFORT KY.
March 30, 2006
BABAK FAKHARPOUR, REVIEWER
Plant I.D. # 21-073-00038
Source AI # 1421
Activity # APE20040001

MINOR PERMIT REVISION (REVISION 1):
TOPY Corporation (hereby referred to as TOPY) operates two plants for the manufacture of automobile wheels. The steel plant makes wheels by welding and forming sheet steel (no changes has been made to the steel plant). The aluminum plant makes wheels by melting aluminum ingots, t-bar, chips, and scrap wheels. A group 2 furnace (MF2) is used to melt only virgin aluminum (large T-bar). The chips are reclaimed from machining operation and are introduced to the delacquering kiln and there are added to the new melting furnace (hereby referred to as MF3). The exhaust from the delacquering kiln is sent to an afterburner and a fabric filter. MF3 which is a group 1 furnace, MF2, and the delacquering kiln's emissions are exhausted through a common duct and directed to the 3 baghouses #2, #3, and #4. Based on conversation with TOPY and the consultant (Ed Mingus of Envirotech Inc.) only cover flux is being used (only nonreactive, non-hap-containing/non-hap-generating gases or agent).

On June 10, 2004 TOPY submitted a revised application to modify the existing secondry aluminum plant in Frankfort, Kentucky. TOPY proposes to replace two of its three existing aluminum-melting furnaces with a single combined melting furnace (MF3). The proposed furnace would be controlled by the existing baghouses.

COMMENTS:
Emission point 45 (A28) Reverbratory Furnace MF-2 was constructed in 1997. This unit was included in Topy's original title V application however, MF-2 was not designated as an emission unit in permit # V-02-015.
401 KAR 63:002: 40 CFR Part 63 national emission standards for hazardous air pollutants; 40 CFR 63.3880 to 63.3981 (Subpart MMMM), Surface Coating of Miscellaneous Metal Parts and Products is applicable to paint lines, coating lines, and electrodeposition painting lines. The compliance date for an existing affected source is January 2, 2007. Topy has not submitted the initial notification report but the company has requested to use the title V application to meet compliance with 40 CFR 63 Subpart A, §63.9(b).

Permit Statement Of Basis
Title V draft permit No. V-02-015
Application Log # 50691 (F896)

Source Description: Topy operates two plants for the manufacture of automobile wheels. The steel plant makes wheels by welding and forming sheet steel. The aluminum plant makes wheels by melting, treating, and casting aluminum. Both plants have various surface treating operations and painting operations.

Comments: Capture efficiency for paint booths in both steel and aluminum plants is based on results of testing using EPA Method 204. VOC emissions from painting are controlled by two separate regenerative thermal oxidizers (RTO's) having 98% destruction efficiency. Particulate controls include an electrostatic precipitator and baghouse for steel welding, several dust collectors for control of aluminum dust, and an afterburner for the aluminum chip recycling process. All of the indirect heat exchangers at this source have been deemed insignificant activities in accordance with division policy regarding natural gas burners under 10 mmBTU/hr intake capacity.

Action under log no. 50691 (F896) is to permit construction/operation of a new steel wheel welding line, and a new paint line for same. This is also the initial issuance of the Title V permit.

Emission factors were supplied by the consultant (Ed Mingus of Envirotech Inc.).
401 KAR 59:010, New process emissions, applies to all affected facilities excepting EIS #'s 09, 13-15, 22, 26-28, 34, 36-38 and 43.
401 KAR 59:015, New indirect heat exchangers, applies to EIS #'s 11, 12, 43 and 44.
401 KAR 59:225, New miscellaneous metal parts and products surface coating operations applies to EIS #'s 10, 16 and 35.
401 KAR 53:010, Ambient air quality standards, applies to emissions of hydrogen fluoride from EIS # 21.
EIS # 09 and Electrodeposition Line #2, which is a part of EIS #10, are exempt from the requirements of 401 KAR 59:225, because low VOC coatings are used.
40 CFR 63, Subpart RRR, National Emission Standards for Hazardous Air Pollutants for Secondary Aluminum Production applies to the thermal chip dryer (EP 43).

EMISSION AND OPERATING CAPS DESCRIPTION: The emissions from construction proposed in Topy's Title V application must have 85% control efficiency for VOC's, as an addition to a major source. Eighty-five percent is the federally enforceable limit stipulated in Regulation 401 KAR 59:225. Because of anticipated increases in business, they have elected not to accept conditional major limits which would allow calculation of PTE based on the 98% control efficiency they actually employ.

OPERATIONAL FLEXIBILITY: There is no limit on the amount of VOC's that can be emitted as a major source. Therefore production can be increased as demand increases as long as the VOC emission standard is met.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.

DESCRIPTION OF CHANGES TO SECTION B (REVISION 1):

Emission points 01, 04, 17 Line #1, Line #2 and Line #3 Flash Butt Welding

The description was changed by quantifying the number of welders operated at each line.

Emission points 03, 05, 18 (S3, S5, S24) Line #1 Disc Welding, Line #2 Disc Welding, Line #3 Disc Welding

The description was changed by removing "Each line consists of four Mag Arc Welders and three Spot Welders, with Line 2 having an additional three Mag Welders for special assembly. Line 1 has no control. Lines 2 and 3 have electrostatic precipitators for particulate control." And adding "Lines 1 and 2 have four Mag Arc Welders each, with Line 2 having an additional three Mag Welders for special assembly and three spot welders. Line 3 consists of six Mag Arc Welders which are controlled and vented to a dust collector. Line 1 has no control for the Mag Arc Welders. Line 2 is controlled by an electrostatic precipitators for particulate control."

Emission points 10, 35, 16 (S10, A17, S20) Paint Lines

Description: The primary particulate control (water curtain) was removed from the description for EP 10 (S10). Also "(e) repair Booth and associated oven (shared with EP 16)" was changed to "(e) repair Booth and associated oven".

Emission point 30 (A13) Smoothing

This point was removed from Section B and was added to Section C of the permit as an insignificant activity.

Emission point 20 (A1) Aluminum Processing

The following processes were removed from service at the Aluminum Plant foundry following the installation of the new MF3 furnace (EP 46 (A1)) (a) Chip Melting Furnace (b) Holding Furnace Zone 2 (f) Jet Melter Zone 1.
Chip Drying Kiln Hood was added to emission point 43 (A24).
Dross Door was added to emission point 46 (A1).
Three Ladle Burners was added to Section C of the permit.
Secondary Smoke Hood was added to emission point 43 (A24).

Emission point 46 (A1) Aluminum Processing

New point: The new group 1 furnace (MF3). Installed in December, 2004.

Emission point 35 (A17) Aluminum Wheel Coating Line

The description of A(17b) was changed to “Colorcoat booth 32” instead of “Clearcoat booth”. 10 CFR 63.3880 to 63.3981(Subpart MMMM), Surface Coating of Miscellaneous Metal Parts and Products is applicable to this emission point.

Emission Point 42 (A23) Chip Recovery Wastes

Magnetic separator, Pneumatic separator were removed from service.

Emission Point 41 (A24) Aluminum Chip recovery

As specified under emission point 20 (A1), Chip Drying Kiln Hood and Secondary Smoke Hood were included in this emission point. Also, in addition to an afterburner, this process is controlled by a cyclone as well. Subpart RRR was also applied.

Emission Point 45 (A28) Reverbratory Furnace (MF-2)

This furnace was installed December of 1997. The group 2 furnace is added to this permit revision along with applicability of Subpart RRR.

Emission Points 18, 19 (S9, S19) Electrodeposition Painting

Installation dates were added to the description.

Insignificant activities

In addition to the above Tool Furnace, and Tumbler system from the Aluminum Plant, the rustproofing application system, and the spot welders on Rim Line #1 from the Steel Plant has been removed. A number of equipments has also been added in this section.